WHAT IS CLAIMED IS:

1. A multilayer piezoelectric actuator device comprising:

a laminated structure including a plurality of piezoelectric elements and a plurality of internal electrodes alternately stacked; and

a pair of external electrodes connected alternately to said internal electrodes,

each of said external electrodes comprising:

an electrode layer formed on a first side surface of said laminated structure; and

a first composite layer formed on said electrode layer and made of a conductive resin including a first conductive material.

2. A multilayer piezoelectric actuator device as claimed in claim 1, wherein said electrode layer is formed on the side surface of said laminated structure by one selected from firing, plating, and sputtering.

3. A multilayer piezoelectric actuator device as claimed in claim 1, wherein said first composite layer is adhered to said electrode layer by thermosetting.

4. A multilayer piezoelectric actuator device comprising:

a laminated structure including a plurality of piezoelectric elements and a plurality of internal electrodes alternately stacked;

a pair of external electrodes connected alternately to said internal electrodes; and

a carbon paper,

each of said external electrodes comprising:

an electrode layer formed on a first side surface of said laminated structure; and

a first composite layer formed on said electrode layer and made of a conductive resin including a first conductive material, said carbon paper being placed on said first composite layer, said electrode layer and said carbon paper being adhered to each other by said first composite layer.

5. A multilayer piezoelectric actuator device comprising:

a laminated structure including a plurality of piezoelectric elements and a plurality of internal electrodes alternately stacked; and

a pair of external electrodes connected alternately to said internal electrodes,

each of said external electrodes comprising:

an electrode layer formed on a first side surface of said laminated structure; and

a first composite layer formed on said electrode layer and made of a conductive resin including a first conductive material,

said multilayer piezoelectric actuator device further comprising a second composite layer formed on said first composite layer, said second composite layer being made of a conductive resin including a second conductive material and a carbon fiber.

6. A multilayer piezoelectric actuator device as claimed in claim 5, wherein said electrode layer and said second composite layer are adhered to each other by said first composite layer.

7. A multilayer piezoelectric actuator device as claimed in claim 5, wherein said second conductive material comprises at least one kind of material selected from Ag, Au, Pt, Pd, Cu, Ni, and C.

8. A multilayer piezoelectric actuator device as claimed in claim 5, wherein said second conductive material has at least one kind of shape selected from a granular shape, a needle-like shape, and a fiber-like shape.

9. A multilayer piezoelectric actuator device as claimed in claim 1, wherein said first conductive material comprises at least one kind of material selected from Ag, Au, Pt, Pd, Cu, Ni, and C.

10. A multilayer piezoelectric actuator device as claimed in claim 1, wherein said first conductive material has at least one kind of shape selected from a granular shape, a needle-like shape, and a fiber-like shape.

Sub A2 cancel.